

SCSI Cable

Installation Instructions

for HP ProLiant DL100 Series Generation 2 Servers



Read instructions completely before beginning installation procedure.

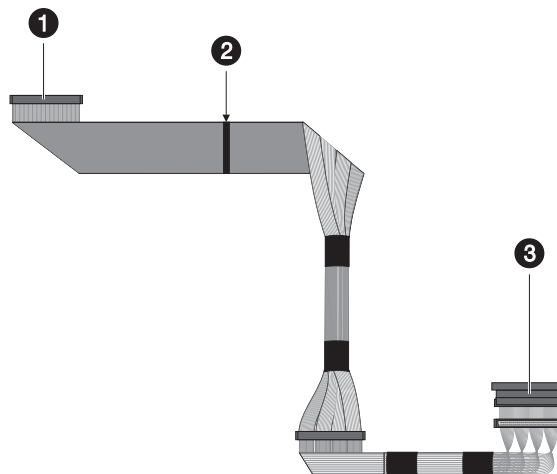
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SCSI Cable Installation Instructions

First Edition (March 2005)
Part Number 381736-001

Identifying the SCSI Cable Parts



| Item | Description |
|------|-----------------|
| 1 | Connector end |
| 2 | 240 mm location |
| 3 | Terminator end |

SCSI Cable Installation Overview

The steps listed below give an overview of the SCSI cable configuration procedure:

1. Installing the SCSI hard drive.
2. Installing the SCSI controller board.
3. Routing the SCSI drive cables.
4. Setting up the SCSI configuration.

Refer to the documentation that came with the SCSI controller board.

SCSI Cable Installation Guidelines

NOTE: The procedures described in this installation sheet assume that the server is out of the rack and is positioned on a flat, stable surface.

IMPORTANT: Observe the pre- and post-installation procedures described in later sections when performing the SCSI cable installation.



CAUTION: Follow the ESD precautions listed in Chapter 2 of the *Server Maintenance and Service Guide* of your ProLiant server when handling any hardware component. You can download a copy of this guide from the HP website at <http://www.hp.com/>



WARNING: Failure to properly turn off the server before you open the server or before you start removing/installing hardware components may cause serious damage as well as bodily harm.



WARNING: To reduce the risk of personal injury from hot surfaces, allow the chassis and any installed hardware component to cool before touching them.


NOTE: This document applies to several server models in the HP ProLiant DL100 Generation 2 server series. The illustrative figures used here may not be an exact match to the user's actual ProLiant server.

Pre- and Post-Installation Procedures

Pre-installation Procedures

1. Turn off the server and all the peripherals connected to it.
2. Unplug all cables from the power outlets to avoid exposure to high energy levels that may cause burns when parts are short-circuited by metal objects such as tools or jewelry.
If necessary, label each one to expedite reassembly.
3. Disconnect telecommunication cables to avoid exposure to shock hazard from ringing voltages.
4. Remove the top cover.

Post-installation Procedures

1. Be sure all components are installed according to the described step-by-step instructions.
2. Check to make sure you have not left loose tools or parts inside the server.
3. Reinstall any expansion board(s), peripheral(s), board cover(s), and system cable(s) that have previously been removed.
4. Reinstall the top cover.
5. Connect all external cables and the AC power cord to the system.
6. Press the power button  on the front panel to turn on the server.

Installing a SCSI Hard Drive

1. Perform the pre-installation procedures described earlier.
2. Select which drive bay you will use to install the new SCSI hard drive.

If the desired drive bay is occupied, remove the currently installed drive following the procedures in the “Removing a Hard Drive” section on the *Installation Sheet* that came with your ProLiant server.

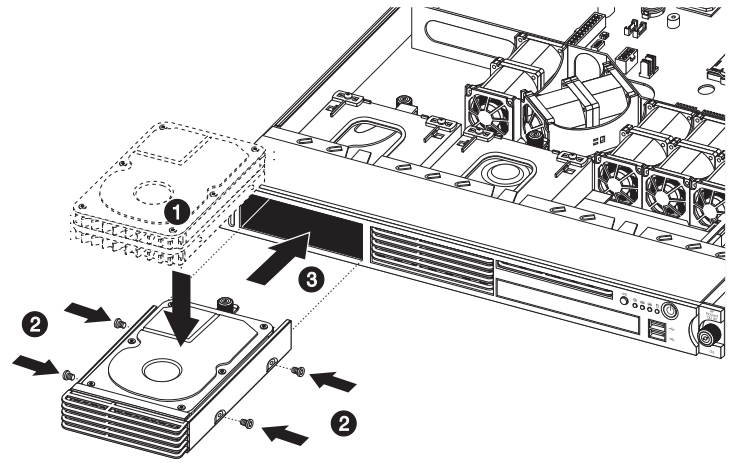
If the desired drive bay is empty, perform steps 1 through 4 of the “Removing a Hard Drive” section on the *Installation Sheet* that came with your ProLiant server, then remove four spare HDD mounting screws from the HDD carrier. You will use these spare screws to install the new drive.

3. Install the new SCSI hard drive in its carrier:

If you are installing the new drive in a previously occupied drive bay, use the carrier and HDD mounting screws you removed from the old drive.

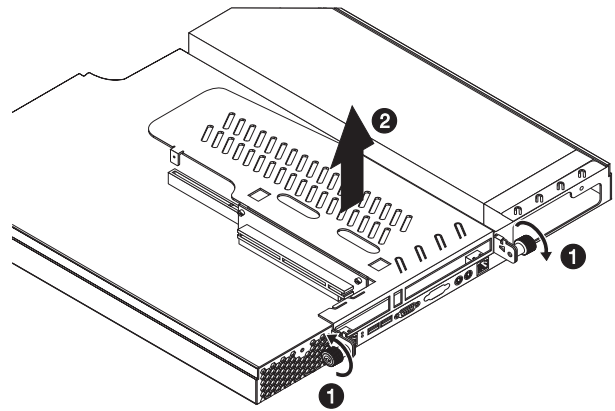
If you are installing the new drive in an empty drive bay, use the carrier and HDD mounting screws you removed from that drive bay.

- a. Align the new hard drive on the carrier.
- b. Secure the hard drive assembly with the four mounting screws.
- c. Slide the hard drive assembly into the chassis.



Installing a SCSI Controller Board

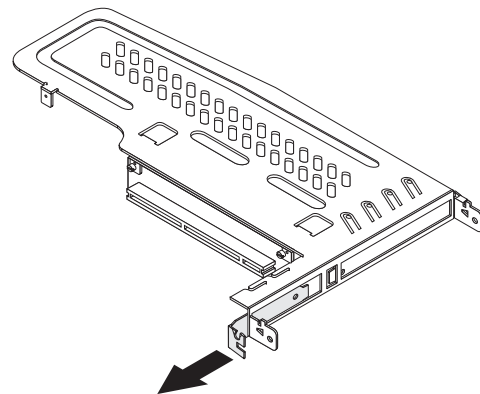
1. Remove the PCI riser board assembly:
 - a. Loosen the two captive thumbscrews that secure the assembly to the chassis.
 - b. Lift the assembly away from the chassis.



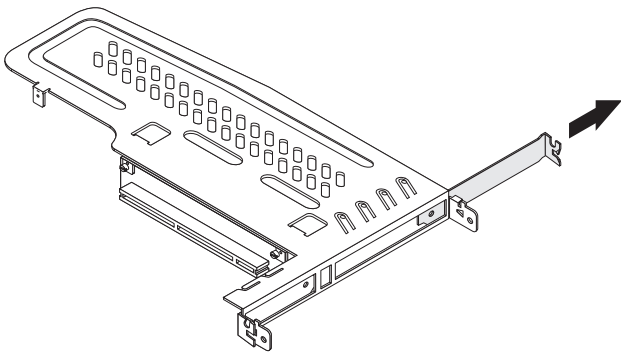
2. Identify the slot that is compatible with the expansion board you intend to install.
3. Pull out the slot cover from the selected slot.
Store it for reassembly later.



CAUTION: Do not discard the slot cover. If the expansion board is removed in the future, the slot cover must be reinstalled to maintain proper cooling.

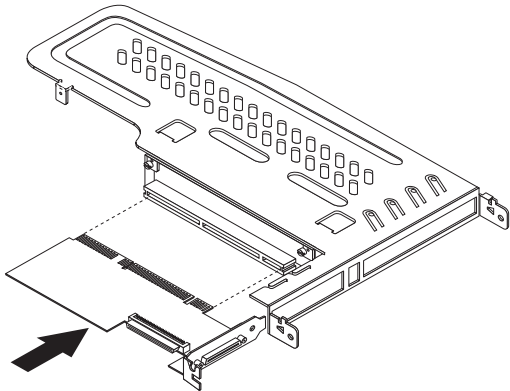


Removing the cover of the low-profile expansion slot



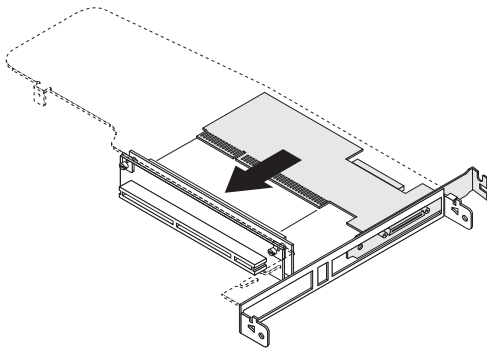
Removing the cover of the standard height/full-length expansion slot

4. Remove the SCSI controller board from its protective packaging, handling it by the edges.
Some controller boards can only be installed in one slot but other boards can be configured to fit in either slot by replacing the default bracket (attached to the board) with a different sized one. The different sized bracket and instructions on how to attach it to the board is included in the option kit.
5. Verify that the board's default bracket is compatible with the configuration of the selected slot.
If it is not compatible, replace the bracket with one that is compatible.
6. Slide the expansion board into the slot.
Firmly press the board to seat it properly on the slot.



Installing the SCSI controller board in the low-profile expansion slot

The figure below shows the plane section of the PCI riser board assembly dimmed out for clarity.



Installing the SCSI controller board in the standard height/full-length expansion slot

Routing the SCSI Drive Cables

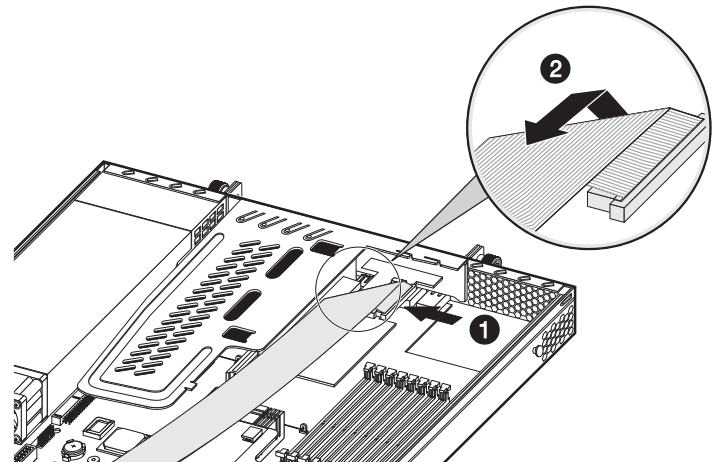
Cable routing for SCSI hard drive varies depending on which expansion slot you installed the SCSI controller board—in the low-profile slot or in the standard height/full-length slot, and to a certain extent, to the location of the cable connectors on the SCSI controller board you installed.



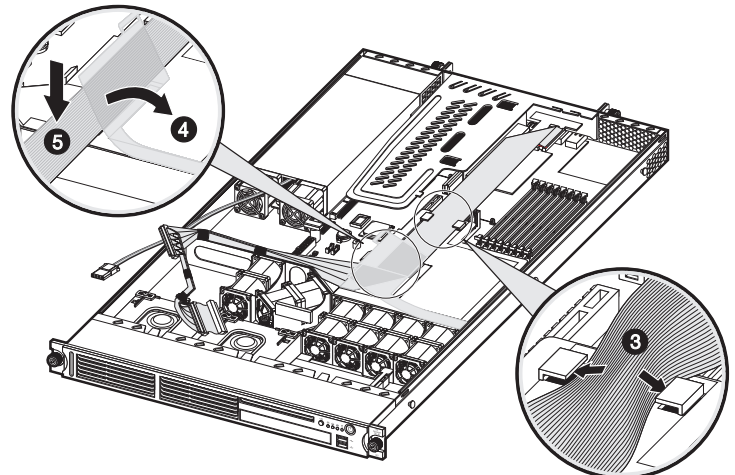
CAUTION: Route the SCSI drive cables neatly. If necessary, secure them using the pre-installed cable clips located on the chassis base. The cables should be routed in a position where they will not be pinched or crimped by the top cover, nor should they hamper proper airflow inside the chassis.

To route the SCSI drive cables when the controller board is installed in the low-profile expansion slot:

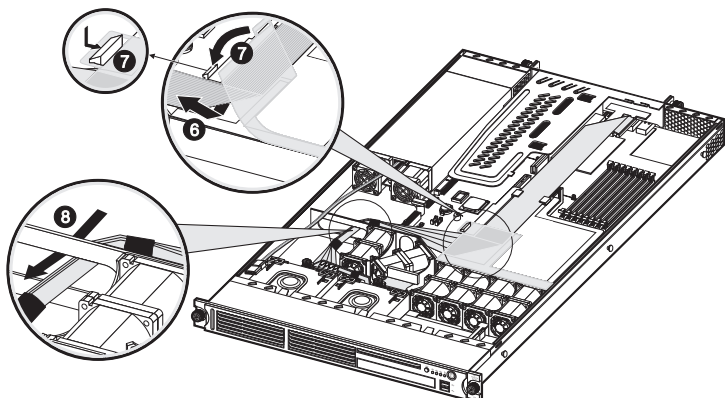
1. Reinstall the PCI riser board assembly.
 2. Route the SCSI cable towards the SCSI hard drive:
 - a. Connect the cable to the corresponding connector on the SCSI controller board.
 - b. Fold the connector end of the SCSI cable in the manner illustrated in the following figure, then route the cable towards the air duct.
- The marked side of the cable should be facing down.



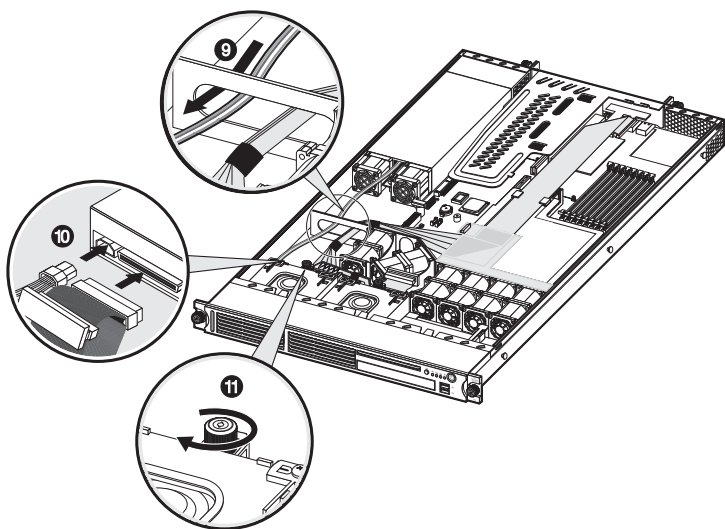
- c. Use the two retainer tabs on the air duct to secure the cable.
- d. Detach the protective mylar sheet on the air duct.
- e. Lay the cable flat on the air duct surface.



- f. Fold the terminated end of the SCSI cable in the manner illustrated in the following figure.
- g. Reattach the mylar sheet over the cable back to the air duct surface.
- h. Route the SCSI cable through the cable management opening of the chassis' partition wall.



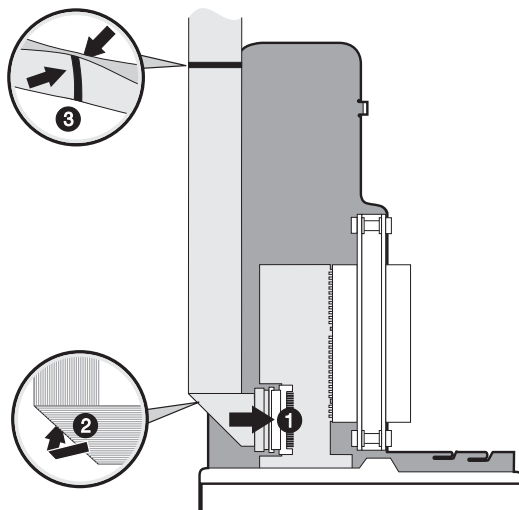
- i. Route the power cable through the cable management opening of the chassis' partition wall.
- j. Connect the SCSI and power cables to their corresponding connectors on the rear of the new drive.
Make sure the terminated end of the SCSI cable is positioned in the manner illustrated in the figure below.
- k. Check that all cables are clear of the hard drive carrier and are properly routed to their corresponding connectors, then tighten the screw that secures the hard drive assembly to the chassis.



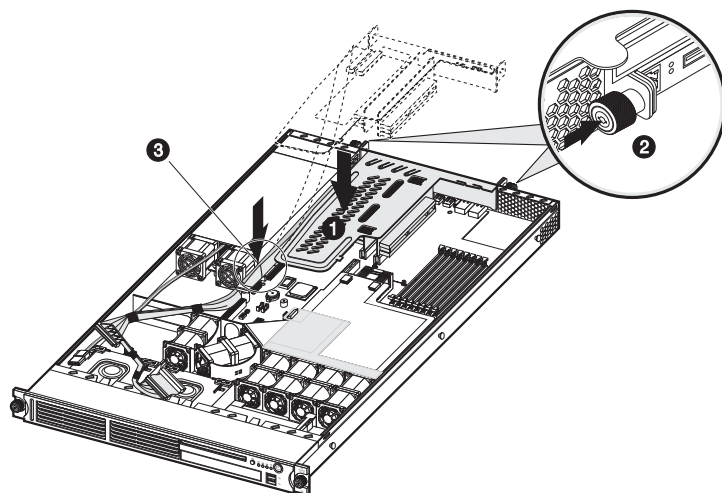
3. Perform the post-installation procedures described earlier.

To route the SCSI drive cables when the controller board is installed in the standard height/full-length expansion slot:

1. Connect the SCSI cable to the SCSI controller board:
 - a. Connect the cable to the corresponding connector on the SCSI controller board.
 - b. Fold the connector end of the SCSI cable in the manner illustrated in the following figure.
 - c. Attach a tie wrap (included in the SCSI cable option kit) in the 240 mm location of the cable.

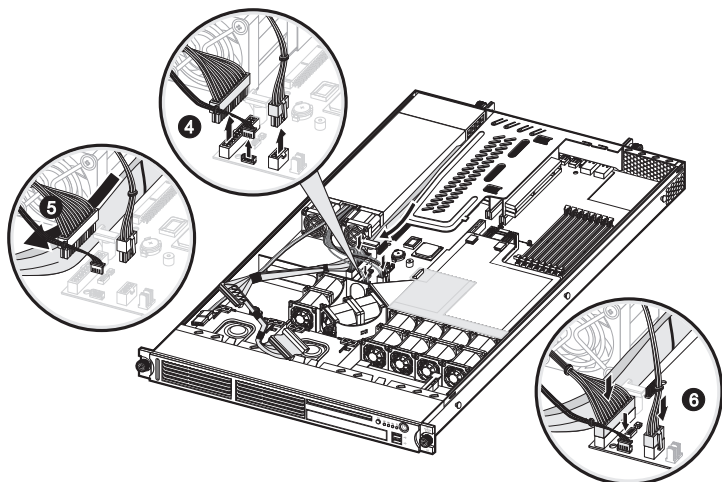


2. Route the SCSI cable towards the SCSI hard drive:
 - a. Align the assembly with the retainers on the rear of the chassis.
 - b. Tighten the two captive thumbscrews to secure the assembly to the chassis.
 - c. Route the SCSI cable between the IDE cable and the power supply unit making sure it lays flat between this space.



- d. Disconnect the following cables from their system board connectors— the 8-pin ATX CPU power cable, the 24-pin ATX system board power cable, and the 4-pin I²C PSU cable.
- e. Route the SCSI cable underneath the three cables you disconnected in the previous step.

- f. Arrange the ATX CPU power cable, the ATX system board power cable, and the I²C PSU cable over the routed SCSI cable, then reconnect them to their corresponding system board connectors.

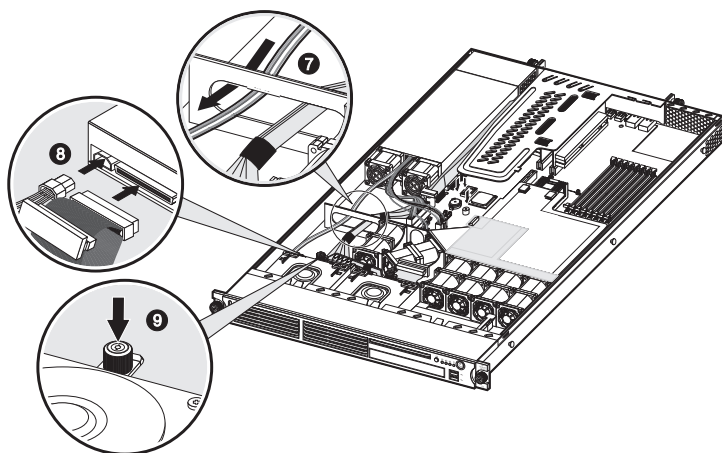


- g. Route the SCSI and power cables through the cable management opening of the chassis' partition wall.

- h. Connect the SCSI and power cables to their corresponding connectors on the rear of the new drive.

Make sure the terminated end of the SCSI cable is positioned in the manner illustrated in the figure below.

- i. Check that all cables are clear of the hard drive carrier and are properly routed to their corresponding connectors, then tighten the screw that secures the hard drive assembly to the chassis.



3. Perform the post-installation procedures described earlier.